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ABSTRACT

This study examined the effects of third grade students' physical attractiveness, IQ scores, and sex on raters' expectations for the students' personality and academic performance. Subjects were 120 undergraduate and graduate students who were either teachers or teacher trainees. A fictitious school transcript and student essay were randomly assigned to each subject to use in rating the fictitious student on two dimensions: (1) personality, and (2) performance on the essay, including a comparison of performance with academic ability. Color photographs of boys and girls who had been judged as either highly attractive or unattractive were attached to 80 of the transcripts; the remaining 40 transcripts served as a control for physical attractiveness. Data were subjected to four 3-way analyses of variance. Results replicated the findings of an earlier study in that positive expectations existed for attractive females but not for attractive males; attractive females received fewer negative personality ratings than unattractive females, whereas the converse of this was true for males. An unexpected finding was an apparent general lowering of raters' judgments when photographs (of either attractive or unattractive students) were attached to the transcripts. (Author/CW)

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Effect of Physical Attractiveness, Sex, and Intelligence on Expectations for Students' Academic Ability and Personality: A Replication

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Expectations of third grade students as influenced by physical attractiveness, sex, and intelligence were studied using a 3 x 2 x 2 factorial design. A fictitious school transcript and student essay were randomly assigned to 120 subjects. The subjects were instructed to rate the students' personality and academic performance. Results indicated that the impact of attractiveness and intelligence on raters' judgments is not necessarily positive, but rather is to a degree mediated by the child's sex.

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Since the Rosenthal and Jacobson study (1968), a great deal of attention has been focused on the relationship between teachers' expectations and students' academic behavior. Unfortunately, attempts to replicate these initial findings have revealed that the issue is considerably more complex than earlier descriptions implied (eg. Fleming & Anttonen, 1971; Clairborn, 1969; Finn, 1972).

Brophy and Good (1970) contributed to clarification of the issue by dividing the expectancy process into two major phases: (1) the formulation of the expectation by the teacher and (2) the communication of the expectation to the student, including subsequent effects it may have on his behavior.

Focusing on the first phase of the process, this study attempts to ascertain the effects of student physical attractiveness, intelligence, and sex on raters' development of expectations for student performance. Recently the physical attractiveness variable has become a special topic for investigation (eg, Dion, Berscheid, & Walster, 1974; Landy & Sigall, 1974; Miller, 1970). Moreover, a few researchers (Kehle, Bramble, and Mason, 1974; Rich, 1975) have indicated that the influence of attractiveness on teacher

judgments appears to interact with other salient student characteristics such as intelligence and sex rather than exerting a unilateral effect.

Specifically, this study examined the impact of the sex, attractiveness, and intelligence variables on subject ratings of the child's personality and academic performance.

METHOD

Subjects

Subjects were 120 undergraduate and graduate students enrolled in two Early Childhood Education courses at Kent State University during the 1974-75 academic year. Subjects were either teachers or teacher trainees.

Stimulus Material

Each subject received a packet of materials containing a letter of explanation, a student transcript accompanied by teacher comments, a Barclay Classroom Climate Inventory (BCCI; Barclay, 1972) rating form, a student essay, and an essay rating form.

The letter of explanation described the study as one in which the ability of experienced teachers and education majors were being compared in regard to accurately describing a child's personality and academic performance. The letter asked the subjects to study the child's transcript and essay and then complete the BCCI form and the essay rating form.

The hypothetical school transcript was designed to describe a typical third grade student of each sex. Each transcript included teacher comments for the past three years which were again constructed to portray an average third grade student.

The adjective checklist, from the Teacher Rating Form of the BCCI, was used to ascertain the perceived personality characteristics of the child in areas of personal adjustment, social adjustment, and motivation. A fictitious 48-word essay on the topic "What I Think About" was developed to depict an average academic performance of a third grade child. This was accomplished by analyzing essays obtained from seventy third grade students. The essays

developed for the fictitious studentwere designed to be average in all respects mentioned above with obvious references to sex and race excluded.

The form used by the subjects in rating the essay was adapted from an instrument developed by Finn (1972). It included nine 5-point Likert-type items that assessed the quality of the student's performance on the following criteria: spelling and punctuation, grammar, sentence structure, organization, relevance of ideas, appropriate word usage, clarity, creativity and imagination, and completeness of thought. A tenth question evaluating whether a child was perceived as working above, at, or below his ability was also included. The results obtained from this final question were defined as level of performance scores.

Information about the child's intelligence was presented with the school transcript in terms of an I.Q. score. The high I.Q. score was set at 110, while the low I.Q. score was 80. The variables of sex and physical attractiveness were represented through the use of professionally made color photographs. Seventy photographs of third grade students were obtained from a commercial photographer. These photographs were then reduced to fifty, twenty-five of each sex, by deleting any pictures of children with physical disfigurements, in uniforms or unusually dressed, and/or posing in a distracting manner. The remaining photographs weredgiven to six third-grade teachers who worked independently to rank order them according to physical attractiveness as a function of sex. The photographs with the highest and lowest mean ranks were selected to represent the attractive and unattractive child. Twenty color prints were made of each and then attached to eighty of the school transcripts. The forty remaining transcripts served as a control for physical attractiveness.

Procedure

Information packets were randomly distributed to the 120 subjects, so

that ten subjects were assigned to each of the twelve treatment combinations. The subjects were instructed to read the school transcript and teacher comments, and then complete the BCCI rating form by choosing any adjectives they felt would most accurately describe the child's classroom behavior. This resulted in a positive and negative personality score for the child. The subjects then read the student's essay and completed the adapted essay evaluation form. All subjects received an identical essay to rate, while the transcripts and comments, which were similar in content, varied according to the sex, and I.Q. of the fictitious student.

RESULTS

The data were subjected to four three-way analyses of variance. The independent variables were sex (male or female), I.Q. (80 or 110), and physical attractiveness (attractive, unattractive, and control as defined by the photographs). The four dependent measures included the positive and negative personality scores from the BCCI, the essay evaluation, and the performance level. The observed cell means are presented in Table 1.

TABLE 1

Observed Cell Means

Sex	I.Q.	Attractiveness	Positive Personality	Negative Personality	Essay	Performance Level
male	110	attractive	11.3	3.6	28.8	1.7
male	80	attractive	14.4	1.9	25.8	1.5
male	110	unattractive	11.1	1.8	24.6	1.5
male	80	unattractive	10.1	2.0	26.6	1.7
male	110	control	11.1	2.8	29.0	1.8
male	80	control	10.3	1.8	28.1	2.0
female	110	attractive	11.8	1.1	25.4	1.4
female	80	attractive	10.3	2.7	24.8	1.5
female	110	unattractive	12.7	3.3	25.3	1.6
female	80	unattractive	8.6	2.9	25.8	2.0
female	110	control	13.2	.9	28.4	1.7
female	80	control	11.1	1.5	25.6	1.6

The F ratios for the four three-way analyses of variance are presented in Table 2. As seen in Table 2, no significant main effects or interactions were noted with respect to the positive personality dependent variable. An

TABLE 2

Summary of Analyses of Variance
as a Function of Dependent Variable

Source	Positive Personality			Negative Personality			Essay			Performance Level		
	df	F	P	df	F	P	df	F	P	df	F	P
Sex (S)	1	.01	.90	1	.37	.54	1	2.87	.09	1	.58	.54
Intelligence (I)	1	1.54	.21	1	.08	.77	1	1.14	.28	1	1.31	.25
Attractiveness (A)	2	.80	.54	2	1.23	.29	2	3.07	.05	2	2.89	.06
S x I	2	3.04	.08	2	3.09	.08	2	.05	.81	2	.14	.70
S x A	2	1.19	.30	2	3.20	.04	2	.72	.50	2	2.45	.09
I x A	2	1.31	.27	2	.01	.98	2	1.88	.15	2	1.42	.24
S x I x A	2	.30	.74	2	1.92	.15	2	.84	.56	2	1.13	.32

interaction of sex by intelligence approached significance at the .08 level. Figure 1 illustrates that females depicted as having high intelligence are rated as having more positive personality characteristics than females described as low in intelligence. Conversely, males described as high in intelligence received fewer ratings of positive personality characteristics than males presented as low in intelligence.

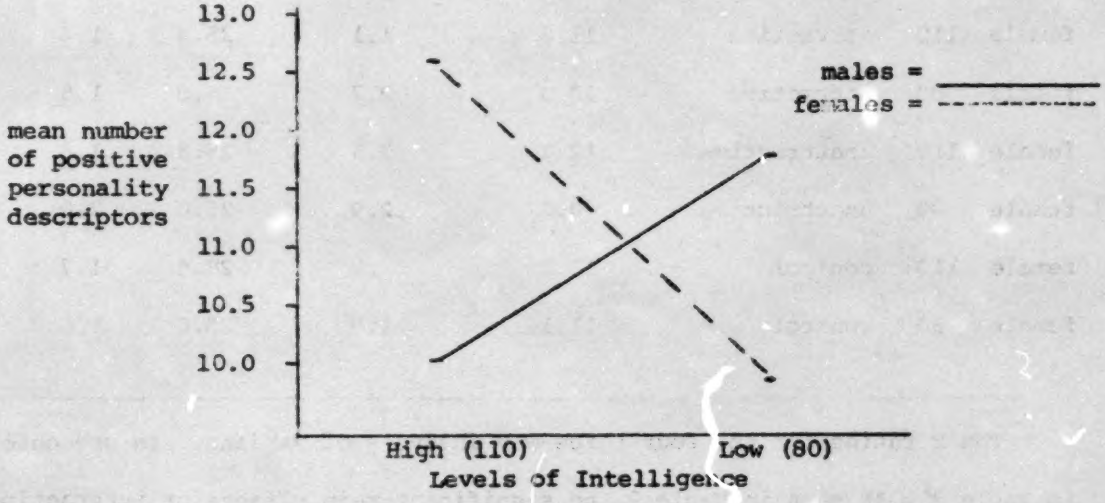

Figure 1. Sex by intelligence interaction on positive personality ratings

The sex by intelligence interaction was again observed on the dependent variable of negative personality at a level approaching significance ($p < .08$ -- See Table 2). Figure 2 illustrates that females described as intelligent received fewer negative personality ratings than females described as low in intelligence. Again the reverse effect was observed for males with "intelligent" males receiving more negative personality ratings than males described as "unintelligent."

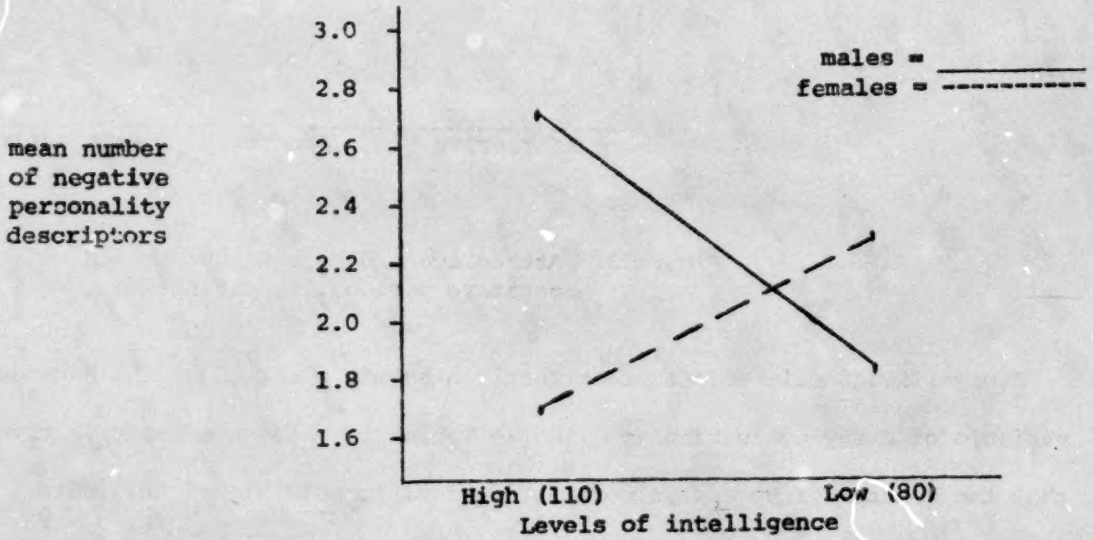

Figure 2. Sex by intelligence interaction on negative personality ratings

In addition, as indicated in Table 2, a significant interaction of attractiveness by sex was evidenced on the variable of negative personality ($p < .04$). Figure 3 reveals that attractive females received fewer negative personality ratings than unattractive females, whereas the converse of this was true for males.

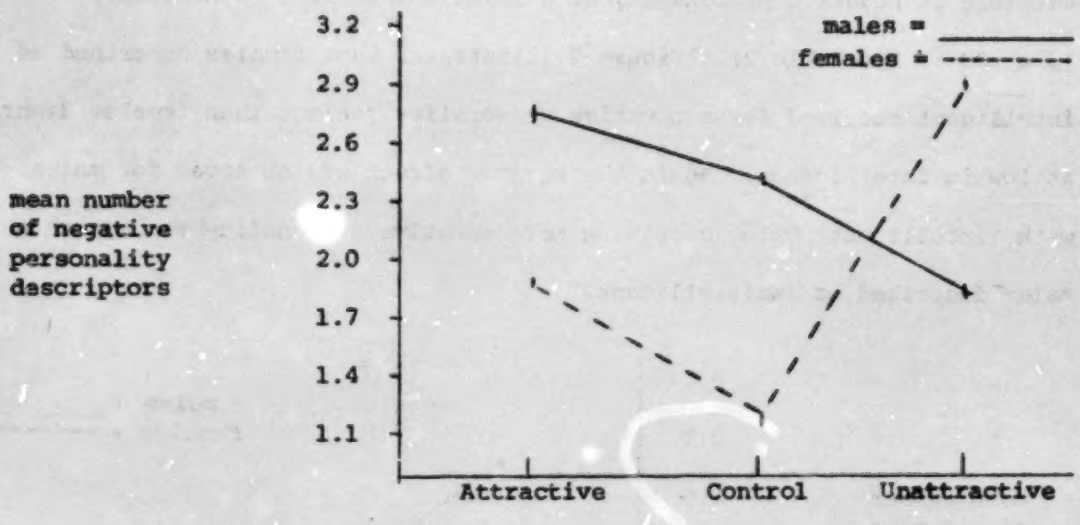

Figure 3. Attractiveness by sex interaction on negative personality ratings

A significant main effect of attractiveness was observed on the dependent variable of essay evaluation ($p < .05$ -- Table 2). Post hoc analysis revealed that the control group essays were rated significantly higher than both attractive and unattractive groups for which pictures were attached.

Consistent with results on the essay evaluation, a main effect of attractiveness approached significance on the dependent variable of performance level ($p < .06$ -- Table 2). Inspection of the means indicates that the attractive group was perceived as underachieving more than either of the other two groups.

Another attractiveness by sex interaction trend ($p < .09$) was observed on this variable as displayed in Figure 4. Once again the significant interaction effect was largely attributable to the discrepancy between attractive and unattractive females. Attractive females were rated as more likely to be underachieving.

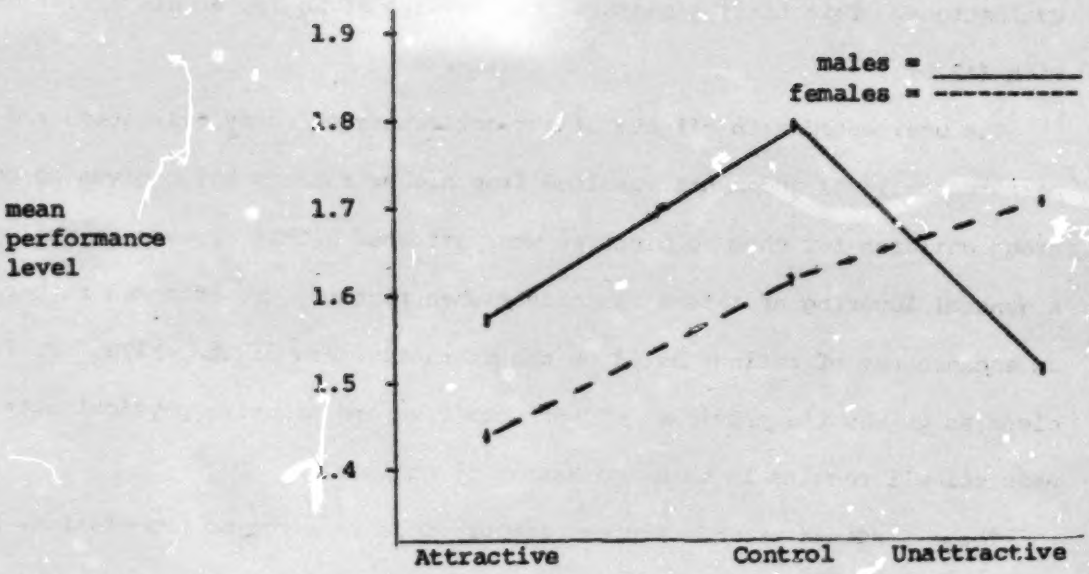

Figure 4. Sex by attractiveness interaction on performance level (Note: 1 = working below ability, 2 = working at ability, and 3 = working above ability).

DISCUSSION

Student characteristics of intelligence and physical attractiveness were observed to affect rater judgments of personality and academic competence differentially depending upon the sex of the child. Considering the intelligence variable, it may be that raters are positively biased in personality evaluations of "intelligent" girls, whereas they rate "intelligent" boys as less well adjusted. This finding may reflect a pervasive sex role stereotype of masculinity that excludes or minimizes intelligence as an important characteristic for young boys. Perhaps the "bookworm" stereotype continues to exist.

Where sex x attractiveness interactions were observed, it was evident that the disparity between attractive and unattractive girls was greater than the disparity between attractive and unattractive boys. Furthermore, in ratings of negative personality indicators, opposite results were obtained for boys and girls with attractive boys and unattractive girls receiving the most negative

evaluations. This finding supports the results of Kehle, et al. (1974) and Rich (1975).

The unexpected main effects of attractiveness on essay evaluation and performance level judgments resulted from higher ratings being given to control group children for whom no pictures were attached. This appears to reflect a general lowering of raters' judgments when pictures are attached rather than an enhancement of ratings based on the attractiveness of the child. It is not clear as to why the provision of both positive and negative physical attractiveness stimuli results in this depression of ratings.

These findings provide support for previous research on expectations by replicating interaction effects between sex and attractiveness and sex and intelligence. Once again the process by which raters form expectations is shown to be a complex combination of information inputs. Teachers should be made aware of these biases in order to avoid unjust and irrelevant student evaluations that may affect subsequent student performance.

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